

Amendments to the Specification:

Please replace the paragraph, beginning at page 11, line 11, with the following rewritten paragraph:

Each beam propagating in each channel of the interferometer is assumed to have a Gaussian profile. The Gaussian beam profile function is determined by, $(1/\omega_0) \cdot \exp(-r^2/\omega_0^2)$, where ω_0 is the focused beam waist. E_1 and E_2 represent the beam optical field amplitude of the radiation emanating from each channel of the interferometer respectively, $|E_1(r) + E_2(r)|^2$ represents the interference intensity profile function, where $E_i(r)$ stands for the field amplitude of the two interfering Gaussian beams ($i=1,2$). Because the two beams propagate at an angle $+\theta$ and $-\theta$ respectively, E_i is a function along the z axis and is a function of θ therefore ultimately η is a function of θ . (See also Optics Communications, 138 (1997) 354-364 *Volume Grating Produced by Intersecting Gaussian Beams in an absorbing medium: A Bragg diffraction model* by Abdulatif Y. Hamad and James P. Wickstead. ~~For for~~ a more complete derivation of the formulae used to calculate η as a function of θ). ~~Appendix A attached hereto shows the sequence of calculations used to derive the optimum interfering angle and may be used to develop a computer program to perform such calculation.~~